

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

TIVO INC.,

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., and
SAMSUNG ELECTRONICS AMERICA,
INC.

Defendants.

Case No. 2:15-cv-1503

JURY TRIAL DEMANDED

FILED UNDER SEAL

**SAMSUNG’S THIRD AMENDED ANSWER, AFFIRMATIVE DEFENSES,
AND COUNTERCLAIMS TO TIVO INC.’S FIRST AMENDED
COMPLAINT FOR PATENT INFRINGEMENT**

Defendants Samsung Electronics Co., Ltd. (“SEC”), and Samsung Electronics America, Inc. (“SEA”) (collectively “Samsung” or “Defendants”), by and through their undersigned counsel, hereby submit their Third Amended Answer and Affirmative Defenses in response to the First Amended Complaint (“Complaint”) of Plaintiff TiVo Inc. (“TiVo”) filed on September 18, 2015. Samsung denies each and every allegation, statement, and/or assertion in the Complaint unless expressly admitted herein. By responding herein, Samsung does not undertake any burden of proof or persuasion not otherwise imposed by law.

GENERAL DENIAL

Samsung denies the allegations in TiVo’s Complaint unless expressly admitted in the following paragraphs.

THE NATURE OF THE ACTION

1. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 1 of the Complaint, and therefore denies those allegations.

2. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 2 of the Complaint, and therefore denies those allegations.

3. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 3 of the Complaint, and therefore denies those allegations.

4. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 4 of the Complaint, and therefore denies those allegations.

5. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 5 of the Complaint, and therefore denies those allegations.

6. Samsung admits that TiVo filed patent infringement actions in this District against EchoStar, AT&T, Verizon, Motorola Mobility, and Cisco. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 6 of the Complaint, and therefore denies those allegations.

7. Samsung denies the allegations of paragraph 7 of the Complaint.

8. Samsung admits that TiVo filed this suit against Samsung in this Court. Samsung denies the remaining allegations of paragraph 8 of the Complaint.

THE PARTIES

9. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 9 of the Complaint, and therefore denies those allegations.

10. Samsung admits that SEC is a corporation organized under the laws of the Republic of Korea, and further admits its correct principal place of business of SEC is at 129 Samsung-ro (Maetan-dong), Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Korea. Samsung further admits that SEC designs and manufactures a wide variety of products and services, including consumer electronics, semiconductors, computer components, set-top boxes with DVR functionality, and mobile phones and tablets. Samsung denies the remaining or contrary allegations of paragraph 10 of the Complaint.

11. Samsung admits that SEA is a corporation organized under the laws of New York with a principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660. Samsung further admits that SEA is a wholly-owned subsidiary of SEC. Samsung further admits that SEA markets, offers for sale, and sells a variety of consumer electronics including set-top boxes with DVR functionality and handheld smartphones. Samsung denies the remaining allegations of paragraph 11 of the Complaint.

12. Samsung admits that as of January 1, 2015, Samsung Telecommunications America, LLC ("STA"), formerly an LLC organized under the laws of Delaware, merged with SEA. Samsung further admits that STA had a principal place of business at 1301 East Lookout Drive, Richardson, Texas 75082, and that SEA is the corporate successor-in-interest to STA. Samsung further admits that STA conducted business in North America with respect to smartphones. Samsung denies the remaining allegations of paragraph 12 of the Complaint.

JURISDICTION AND VENUE

13. Samsung admits that TiVo's allegations of patent infringement purport to arise under the patent laws of the United States of America, 35 U.S.C. § 1, *et seq.*, including 35 U.S.C. § 271, but denies that such allegations are meritorious. Samsung admits that, for the purposes of this action only, this Court has subject matter jurisdiction over this suit pursuant to 28 U.S.C. §§ 1331 and 1338(a).

14. For purposes of this action only, Samsung does not contest personal jurisdiction. Samsung denies the remaining allegations of paragraph 14 of the Complaint.

15. Samsung admits that venue is permissible, for purposes of this action only, under 28 U.S.C. §§ 1391 and 1400, but denies that venue is proper or convenient and also denies the remaining allegations of paragraph 15 of the Complaint.

FACTUAL BACKGROUND

16. Samsung admits that TiVo's Complaint involves four patents that TiVo purports to own. Samsung denies the remaining allegations of paragraph 16 of the Complaint.

17. Samsung admits that U.S. Patent No. 6,233,389 ("the '389 patent"), entitled "Multimedia Time Warping System," issued on May 15, 2001. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 17 of the Complaint, and therefore denies those allegations.

18. Samsung admits that U.S. Patent No. 6,792,195 ("the '195 patent"), entitled "Method And Apparatus Implementing Random Access And Time-Based Functions On A Continuous Stream Of Formatted Digital Data," issued on September 14, 2004. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 18 of the Complaint, and therefore denies those allegations.

19. Samsung admits that U.S. Patent No. 7,558,472 (“the ’472 patent”), entitled “Multimedia Signal Processing System,” issued on July 9, 2009. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 19 of the Complaint, and therefore denies those allegations.

20. Samsung admits that U.S. Patent No. 8,457,476 (“the ’476 patent”), entitled “Multimedia Signal Processing System,” issued on June 4, 2013. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 20 of the Complaint, and therefore denies those allegations.

21. Samsung admits that TiVo filed a lawsuit in January 2004, in which it asserted the ’389 patent, against EchoStar Communications Corp, et al., in *TiVo Inc. v. EchoStar Communications Corp., et al.*, Case No. 2:04-cv-1-DF, in the Eastern District of Texas. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 21 of the Complaint, and therefore denies those allegations.

22. Samsung admits that TiVo filed a lawsuit in August 2009, in which it asserted patents including the ’389 patent, against AT&T Inc., in *TiVo Inc. v. AT&T Inc., et al.*, Case No. 2:09-cv-259-DF, in the Eastern District of Texas. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 22 of the Complaint, and therefore denies those allegations.

23. Samsung admits that TiVo filed a lawsuit in August 2009, in which it asserted patents including the ’389 patent, against Verizon Communications, Inc., in *TiVo Inc. v. Verizon Communications, Inc.*, Case No. 2:09-cv-257-DF, in the Eastern District of Texas. Samsung is

without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 23 of the Complaint, and therefore denies those allegations.

24. Samsung admits that, in a lawsuit filed in March 2012, TiVo asserted patents including the '389 and '195 patents against Motorola Mobility, Inc., General Instruments, and Time Warner Cable, in *Motorola Mobility, Inc. et al. v. TiVo Inc.*, Case No. 5:11-cv-53-JRG, in the Eastern District of Texas. Samsung admits that TiVo filed a lawsuit in June 2012, in which it asserted patents including the '389 and '195 patents, against Cisco Systems, Inc., in *TiVo Inc. v. Cisco Systems, Inc.*, Case No. 2:11-cv-311-JRG, in the Eastern District of Texas. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 24 of the Complaint, and therefore denies those allegations.

25. Samsung admits that Samsung had knowledge of the '389 and '195 patents before TiVo filed this action. However, due to the lack of specific factual allegations in paragraph 25 of the Complaint, Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 25 of the Complaint, and therefore denies those allegations.

26. Samsung admits that, at least through the filing of this action, it obtained knowledge of the '389, '195, '472, and '476 patents. Samsung further admits that Samsung had knowledge of the '389 and '195 patents before TiVo filed this action. However, due to the lack of specific factual allegations in paragraph 26 of the Complaint, Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 26 of the Complaint, and therefore denies those allegations.

27. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 27 of the Complaint, and therefore denies those allegations.

28. Samsung admits that it was generally aware of prior litigations initiated by TiVo, in which it alleged infringement of TiVo's patents. However, due to the lack of specific factual allegations in paragraph 28 of the Complaint, Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 28 of the Complaint, and therefore denies those allegations.

29. Samsung admits that it was generally aware of prior litigations initiated by TiVo, in which it alleged infringement of TiVo's patents. Samsung further admits that Samsung had knowledge of the '389 and '195 patents before TiVo filed this action. However, due to the vagueness of factual allegations in paragraph 29 of the Complaint, Samsung is without knowledge or information sufficient to form a belief as to the truth of these allegations, and therefore denies those allegations.

30. Samsung admits that the Complaint alleges that TiVo holds rights in the '389, '195, '472, and '476 patents. Samsung is without knowledge or information sufficient to form a belief as to the truth of the remaining allegations contained in paragraph 30 of the Complaint, and therefore denies those allegations.

31. Samsung admits that it develops, manufactures, and supplies equipment, including set-top boxes to Time Warner Cable and other Samsung customers. Samsung denies the remaining allegations in paragraph 31 of the Complaint.

32. Samsung admits that it develops, manufactures, and supplies portable battery-powered devices such as smartphones and tablets. Samsung also admits that these devices

include certain device models marketed under the names Galaxy Note, Galaxy Mega, Galaxy S, and Galaxy Tab. Samsung denies the remaining allegations in paragraph 32 of the Complaint.

FIRST ALLEGED CLAIM FOR RELIEF (U.S. PATENT NO. 6,233,389)

33. Samsung repeats and incorporates by reference the responses in paragraphs 1-32, as though fully set forth herein.

34. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 34 of the Complaint, and therefore denies those allegations.

35. Samsung denies the allegations of paragraph 35 of the Complaint.

36. Samsung denies the allegations of paragraph 36 of the Complaint.

37. Samsung denies the allegations of paragraph 37 of the Complaint.

38. Samsung denies the allegations of paragraph 38 of the Complaint.

39. Samsung denies the allegations of paragraph 39 of the Complaint.

40. Samsung denies the allegations of paragraph 40 of the Complaint.

41. Samsung denies the allegations of paragraph 41 of the Complaint.

42. Samsung denies the allegations of paragraph 42 of the Complaint.

SECOND ALLEGED CLAIM FOR RELIEF (U.S. PATENT NO. 6,792,195)

43. Samsung repeats and incorporates by reference the responses in paragraphs 1-32, as though fully set forth herein.

44. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 44 of the Complaint, and therefore denies those allegations.

45. Samsung denies the allegations of paragraph 45 of the Complaint.

46. Samsung denies the allegations of paragraph 46 of the Complaint.

47. Samsung denies the allegations of paragraph 47 of the Complaint.

48. Samsung denies the allegations of paragraph 48 of the Complaint.

49. Samsung denies the allegations of paragraph 49 of the Complaint.

50. Samsung denies the allegations of paragraph 50 of the Complaint.

51. Samsung denies the allegations of paragraph 51 of the Complaint.

52. Samsung denies the allegations of paragraph 52 of the Complaint.

THIRD ALLEGED CLAIM FOR RELIEF (U.S. PATENT NO. 7,558,472)

53. Samsung repeats and incorporates by reference the responses in paragraphs 1-32, as though fully set forth herein.

54. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 54 of the Complaint, and therefore denies those allegations.

55. Samsung denies the allegations of paragraph 55 of the Complaint.

56. Samsung denies the allegations of paragraph 56 of the Complaint.

57. Samsung denies the allegations of paragraph 57 of the Complaint.

58. Samsung denies the allegations of paragraph 58 of the Complaint.

59. Samsung denies the allegations of paragraph 59 of the Complaint.

60. Samsung denies the allegations of paragraph 60 of the Complaint.

61. Samsung denies the allegations of paragraph 61 of the Complaint.

62. Samsung denies the allegations of paragraph 62 of the Complaint.

FOURTH ALLEGED CLAIM FOR RELIEF (U.S. PATENT NO. 8,457,476)

63. Samsung repeats and incorporates by reference the responses in paragraphs 1-32, as though fully set forth herein.

64. Samsung is without knowledge or information sufficient to form a belief as to the truth of the allegations contained in paragraph 64 of the Complaint, and therefore denies those allegations.

65. Samsung denies the allegations of paragraph 65 of the Complaint.

66. Samsung denies the allegations of paragraph 66 of the Complaint.

67. Samsung denies the allegations of paragraph 67 of the Complaint.

68. Samsung denies the allegations of paragraph 68 of the Complaint.

69. Samsung denies the allegations of paragraph 69 of the Complaint.

70. Samsung denies the allegations of paragraph 70 of the Complaint.

71. Samsung denies the allegations of paragraph 71 of the Complaint.

72. Samsung denies the allegations of paragraph 72 of the Complaint.

ANSWER TO TIVO'S PRAYER OF RELIEF

Samsung denies that TiVo is entitled to any relief whatsoever from Samsung as prayed for in the Complaint, denies that TiVo is entitled to an injunction, and denies that TiVo is entitled to any other relief.

RESPONSE TO TIVO'S DEMAND FOR JURY TRIAL

Samsung hereby demands trial by jury for all issues so triable.

SAMSUNG'S AFFIRMATIVE DEFENSES

In addition to the defenses described below, Samsung specifically reserves the right to assert additional defenses as they become known through the course of discovery.

FIRST AFFIRMATIVE DEFENSE
(Invalidity)

73. The asserted claims of the '389, '195, '472, and '476 patents (the "TiVo Asserted Patents") are invalid because they fail to satisfy one or more of the conditions for patentability specified in Title 35 of the United States Code, including, without limitation, §§ 101, 102, 103, 112, 116, 119 and/or 120.

SECOND AFFIRMATIVE DEFENSE
(Noninfringement)

74. Samsung does not infringe and has not infringed under any theory (including directly, jointly, contributorily, or by inducement) any valid and enforceable claim of the TiVo Asserted Patents, either literally or under the doctrine of equivalents.

THIRD AFFIRMATIVE DEFENSE
(Statutory Damages Limitations)

75. Plaintiff's recovery for alleged infringement of the TiVo Asserted Patents, if any, is limited by Title 35 of the United States Code, including, without limitation, 35 U.S.C. §§ 286 and 287, as a result of, *inter alia*, TiVo's failure to mark its products, and/or to sufficiently require and police its licensees' obligation to mark their licensed products with the patent numbers of the TiVo Asserted Patents.

FOURTH AFFIRMATIVE DEFENSE
(Prosecution History Estoppel)

76. Plaintiff is estopped, based on statements, representations, and admissions made during the prosecution of the patent applications resulting in the TiVo Asserted Patents, as well as reissue and/or reexamination proceedings related to any of the TiVo Asserted Patents, from asserting that Samsung has infringed, directly or indirectly, any claim of the TiVo Asserted Patents, either literally or under the doctrine of equivalents.

FIFTH AFFIRMATIVE DEFENSE
(License, Release, Covenant Not to Sue, and/or Patent Exhaustion)

77. Plaintiff's claims are barred in whole or in part pursuant to a covenant not to sue, release, an express and/or implied license as a result of Plaintiff's agreements with Samsung business partners, *inter alia*, Google, Inc., Verizon, and AT&T, and/or the doctrine of patent exhaustion

SIXTH AFFIRMATIVE DEFENSE
(Patent Misuse)

78. Plaintiff's claims are barred in whole or in part by the equitable doctrine of patent misuse.

SEVENTH AFFIRMATIVE DEFENSE
(Laches)

79. Plaintiff's claims are barred in whole or in part by the doctrine of laches as a result of, *inter alia*, TiVo's inexcusable delay in bringing this action more than six (6) years after TiVo knew or should have known of Samsung's accused activities, and because of the prejudice caused to Samsung as a result of TiVo's delay.

EIGHTH AFFIRMATIVE DEFENSE
(Waiver, Estoppel)

80. Plaintiff's claims are barred in whole or in part by the doctrine of waiver and/or estoppel as a result of, *inter alia*, TiVo's affirmative statements and behavior suggesting to Samsung that TiVo would not assert the claims in this action against Samsung.

NINTH AFFIRMATIVE DEFENSE
(Unenforceability)

81. Upon information and belief, the '389, '472, and '476 patents are unenforceable due to inequitable conduct and/or unclean hands.

Fraudulent Priority Claim

82. The '472 and '476 patents are unenforceable by reason of inequitable conduct because the named inventors and/or the attorneys responsible for prosecuting the application that led to the '472 and '476 patents (collectively, "Applicants"), all of whom had the duty to disclose to the United States Patent and Trademark Office ("USPTO") information material to the patentability of the subject matter claimed in the applications for the '472 and '476 patents, willfully and knowingly withheld and affirmatively misrepresented in the proceedings before the USPTO information concerning priority and patentability, resulting in the issuance of the '472 and '476 patents.

83. A claim for priority is inherently material to patentability because a priority date may determine validity, whether an issue arises in prosecution or later in court challenges to validity. An active misrepresentation made during prosecution in order to avoid prior art is egregious misconduct and "highly material." A given misrepresentation need not immediately affect patentability to be considered material.

84. Upon information and belief, one or more Applicants (including patent prosecution attorney, Kirk Wong) made material misrepresentations, with the intent to deceive the USPTO, by filing false statements concerning the priority of the '472 patent, and continue to make misrepresentations after issuance of the '472 patent by prosecuting the progeny of the '472 patent, including the '476 patent. The selective withholding and/or misrepresentation of such highly material information is indicative of a plain intent to deceive. Moreover, given the unmistakably false nature of the misrepresentations, the most reasonable inference is not an innocent mistake, but an intent to deceive.

85. Upon information and belief, Applicants were at all relevant times aware of their duty to disclose material information to the USPTO during the prosecution of the application for the '472 and '476 patents. Samsung's belief is based on at least the fact that Applicants were represented by patent prosecution counsel. Despite this awareness, Applicants, with a specific intent to deceive the USPTO, concealed from and/or misrepresented to the USPTO material information as set forth herein.

86. The knowing and willful concealment and/or misrepresentation of material information during the prosecution of the '472 and '476 patents, as well as the most reasonable inferences that can be drawn from the facts pled herein, renders the same unenforceable by reason of inequitable conduct and/or unclean hands.

87. The '472 and '476 patents are unenforceable because the Applicants misrepresented to the USPTO that the application for the '472 patent is (1) a continuation-in-part of a continuation of the '389 patent and (2) is nonetheless entitled to the '389 patent's priority date. The USPTO relied on the misrepresentation and would not have issued the '472 or '476 patent had it known the correct priority date.

88. Contrary to the Applicants' misrepresentation, the '472 and '476 patents are not entitled to the priority date of the '389 patent because the '389 patent specification does not provide 35 U.S.C. § 112 support for the subject matter claimed in the '472 or '476 patents. *See* 35 U.S.C. § 120. One of ordinary skill in the art would not find 35 U.S.C. § 112 support for any claim of the '472 or '476 patent in the specification of the '389 patent.

89. By way of example only, all of the claims of the '472 recite an "output section . . . including" a "media switch." The '389 patent specification does not disclose any such configuration wherein a "media switch" is part of an "output section." To the contrary, the '389

patent specification only describes a configuration wherein the media switch and output section are separate and discrete components.

90. By way of another example only, all claims of the '472 and '476 patents recite a "bus arbiter," which is not supported by the specification of the '389 patent.

91. Indeed, recognizing the lack of support from the '389 patent specification, in Applicant's original August 22, 2001 application for the '472 patent, Applicants originally claimed only that it was a continuation-in-part of the later-abandoned U.S. Patent Application Ser. No. 09/827,029 ("the Abandoned '029 Application"), filed on April 6, 2001 and that it claimed priority to a U.S. Provisional Patent Application Ser. No. 60/226,856 ("the '856 Provisional Application"). Applicants made no mention of the '389 patent or of a continuation thereof.

92. Subsequently, in a January 28, 2008 office action, the USPTO issued a non-final rejection of then-pending claims 1-24 and 36-41 in the application for the '472 patent, as anticipated under 35 U.S.C. §102(e) by U.S. Patent Application Publication No. 2005/0122335 ("MacInnis").

93. In response, Applicants misrepresented the priority date to which the application for the '472 patent was entitled. In a June 9, 2008 response to the January 28 office action, Applicants amended the application's specification to state, for the first time (almost seven years after filing the application) that "U.S. Patent Application Ser. No. 09/827,029 [to which the application for the '472 patent had always claimed priority as a continuation-in-part] is a Continuation of U.S. Patent 6,233,389, filed on July 30, 1998."

94. Applicants further compounded their misrepresentation, stating falsely: "Applicants note that the current Application claims priority to U.S. Patent No. 6,233,389, filed

on July 30, 1998. The features of Claim 1 are fully supported in the parent application which predates the priority date of MacInnis which is apparently December 14, 1999, given that the Office Action has pointed to new material in MacInnis' parent application U.S. Patent No. 6,853,385 that was filed on August 18, 2000. Therefore, MacInnis does not apply."

95. The June 9, 2008 response to the January 28 office action was signed by patent prosecution attorney Kirk D. Wong.

96. A patent application's priority date is "material" as that term is understood in the context of the applicable law. Moreover, submission of a false statement to the USPTO is egregious misconduct which is material. *Intellect Wireless, Inc. v. HTC Corp.*, 732 F.3d 1339, 1344 (Fed. Cir. 2013) (citing *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276, 1292 (Fed. Cir. 2011) (en banc) ("When the patentee has engaged in affirmative acts of egregious misconduct, such as the filing of an unmistakably false affidavit, the misconduct is material.")).

97. The USPTO would have rejected every claim of the '472 patent in view of the MacInnis patent application, had it known that the '472 patent was not entitled to claim priority to the '389 patent's filing date.

98. The priority date is also material because, in further examining the '472 patent and its progeny, including the '476 patent, the USPTO only relied upon prior art based on the false priority date misrepresented by the Applicants.

99. The fraud on the USPTO continued after issuance of the '472 patent, at least via Mr. Wong perpetuating the misleading and false representations concerning the priority claim of the '472 patent in connection with the prosecution of continuations to the patent application of the '472 patent. In total, Applicants have filed at least seven additional continuation and

divisional patent applications claiming priority to the application that led to the '472 patent, including the application which led to the '476 patent at issue in this case.

100. Applicants have continued to make the misrepresentations in question after Samsung put them on notice of the serious, dispositive irregularities in the priority claim of the '472 patent. The single most reasonable inference is that Applicants made the misrepresentations in recognition of those irregularities.

101. For example, on May 16, 2016, more than two weeks after receiving Samsung's invalidity contentions in this case (the contents of which are incorporated herein by reference), which outline the false nature of Applicants' priority claim, Applicants submitted to the USPTO an information disclosure statement in the pending related applications that claim priority to the application for the '472 patent, without disclosing to the USPTO Samsung's contention that the applications are not entitled to the '389 patent's priority date or otherwise correcting the false priority claims.

102. Applicants' May 16, 2016 filings further fail to disclose to the USPTO the numerous prior art references cited in Samsung's invalidity contentions which may post-date the '389 patent's priority date but which are prior art to the pending applications which claim priority to the '472 applications, if the claims are not fully supported by the '389 patent specification.

103. Applicants' continued misleading and false representations in the continuation and divisional applications are evidence of the intent to deceive concerning the fraudulent priority claim of the '472 and '476 patents. Indeed, Applicants' misleading and false representations are evidence of a pattern or plan to deceive the USPTO, and, standing alone, are independent evidence that inequitable conduct occurred during prosecution. *McKesson Info.*

Solutions, Inc. v. Bridge Medical, Inc., 487 F.3d 897, 918 (Fed. Cir. 2007) (relying on patent counsel's conduct in a related application, after he became aware of the material information, to infer intent to deceive); *Semiconductor Energy Lab. Co. v. Samsung Elecs. Co.*, 4 F. Supp. 2d 477, 485 (E.D. Va. 1998) *aff'd*, 204 F.3d 1368 (Fed. Cir. 2000), *amended* (Apr. 5, 2000) and *aff'd*, 204 F.3d 1368 (Fed. Cir. 2000) (relying on inconsistent statements in a related application to infer intent to deceive). An inference of intent to deceive is appropriate where the Applicant engages in "a pattern of lack of candor" including where the Applicant repeatedly makes factual representations "contrary to the true information he had in his possession." *Apotex Inc. v. UCB, Inc.*, 763 F.3d 1354, 1362 (Fed. Cir. 2014); *see also Intellect Wireless, Inc.* 732 F.3d at 1344-45 (relying on post-allowance activity in finding "a pattern of deceit, which makes the inference [of the intent to deceive] stronger"); *Transcend Med., Inc. v. Glaukos Corp.*, 2015 WL 5546989 at * 8 (D. Del. Sept. 18, 2015) (relying on "an ongoing pattern of deception aimed at the USPTO" to deny summary judgment of no inequitable conduct); *Worldwide Home Products, Inc. v. Bed, Bath and Beyond, Inc.*, 74 F. Supp. 3d 626, 637 (S.D.N.Y. 2015) (noting that "continued pattern of disingenuous behavior . . . strengthens the inference of his intent to deceive the PTO examiner").

104. No reasonable patent practitioner would have filed the application that led to the '472 patent as claiming priority to the '389 patent because the '472 patent's claims are not supported by the '389 patent's specification. Indeed, Applicants did not originally do so, but only contrived the priority claim to avoid prior art cited by the USPTO. Mere incompetence or mistake cannot explain conduct this egregious, leaving intent to deceive as the single most reasonable inference. Applicants' *ex post facto* efforts to modify the priority claim and

Applicants' continued failure to notify the USPTO of Samsung's contentions are compelling evidence of intent to deceive.

105. Due at least to the inequitable conduct associated with the prosecution of the '472 and '476 patents, the '389 patent is also unenforceable under the doctrine of infectious unenforceability, as an immediate and necessary relationship exists between the enforcement of claims of the '472 and '476 patents and enforcement of the claims of the '389 patent. *See Keystone Driller Co. v. General Excavator Co.*, 290 U.S. 240 (1933); *Agfa Corp. v. Creo Prods, Inc.*, 451 F.3d 1366 (Fed. Cir. 2006); *Consolidated Aluminum Corp. v. Foseco Int'l, Ltd.*, 910 F.2d 804 (Fed. Cir. 1990).

Withholding of Material Prior Art – TiVo Series 1

106. The '389, '472 and '476 patents are also unenforceable based on the inequitable conduct of one or more of the Applicants, who, upon information and belief, deliberately withheld material prior art references, including the TiVo Series1 product, which went on sale in the United States in March 1999.

107. As described above, the claims of the '472 and '476 patents are not entitled to the '389 patent's priority date, because the '389 patent's specification does not support the subject matter of the '472 or '476 patents' claims. Nor are the '472 and '476 patents entitled to the '856's Provisional Application's priority date, as the subject matter of '472 and '476 patents' claims are not supported by the '856 Provisional Application. Accordingly, the priority date to which the '472 and '476 patents are entitled, at the earliest, is the filing date of the application that led to the '472 patent, *i.e.*, August 22, 2001.

108. Consequently, Applicants were not entitled to a patent "if the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, *more than one year prior to the date of application* for patent in the United States,” *i.e.*, prior to August 22, 2000. 35 U.S.C. § 102(b).

109. By at least TiVo’s own admission, TiVo’s Series1 product—which on sale as early as March 1999—practiced all asserted claims of the ’472 and ’476 patents, rendering the TiVo Series1 product anticipatory prior art under 35 U.S.C. § 102(b). Specifically, TiVo’s February 8, 2016 P.R. 3-1 Disclosure of Infringement Contentions, served according to the Court’s Docket Control Order, state that the TiVo Series1 product practiced all asserted claims of the TiVo Asserted Patents.

110. Despite Applicants’ awareness of the TiVo Series1 and its anticipatory nature, Applicants withheld information regarding the TiVo Series1 product from the USPTO.

111. All of the named inventors of the ’472 and ’476 patents, and their counsel, had the duty to disclose to the USPTO information material to the patentability of the subject matter claimed in the applications for the ’472 and ’476 patents.

112. Because the TiVo Series1 product is anticipatory prior art, it is “but for” material to patentability, meaning that but for Applicants’ failure to disclose the TiVo Series1 product to the USPTO, the USPTO would never have issued the ’472 and ’476 patents.

113. Upon information and belief, Applicants’ decision to withhold information regarding the TiVo Series1 product from the USPTO was done with the intent to deceive the USPTO. As described above, subsequent to Samsung notifying TiVo of the fraudulent nature of its priority claim regarding the ’472 and ’476 patents, Applicants have continued to file statements with the USPTO without notifying the USPTO of Samsung’s contention or providing to the USPTO known prior art—like the TiVo Series1 product—which was on sale more than a year prior to the patents’ proper priority date. Applicants’ continued withholding of material

prior art is evidence of a pattern or plan to deceive the USPTO, and, standing alone, is independent evidence that inequitable conduct occurred.

114. Due at least to this inequitable conduct associated with the prosecution of the '472 and '476 patents, the '389 patent is also unenforceable under the doctrine of infectious unenforceability, as an immediate and necessary relationship exists between the enforcement of claims of the '472 and '476 patents and enforcement of the claims of the '389 patents. *See Keystone Driller Co. v. General Excavator Co.*, 290 U.S. 240 (1933); *Agfa Corp. v. Creo Prods, Inc.*, 451 F.3d 1366 (Fed. Cir. 2006); *Consolidated Aluminum Corp. v. Foseco Int'l, Ltd.*, 910 F.2d 804 (Fed. Cir. 1990).

Withholding of Material Prior Art – Texas Instruments AV7100 & AV7110 Chips

115. The '389, '472, and '476 patents are also unenforceable based on inequitable conduct committed during the prosecution of those patents by the Applicants, including at least named inventors Kurt Heaton, Ching Tong Chow, Jean Kao, David Lockett, and Roderick McInnis.

116. Applicants, including inventors Heaton, Chow, Lockett, Kao, and McInnis, had individual duties of candor and good faith to the USPTO, including an obligation to disclose to the USPTO all information known to them that was material to the patentability of the application which led to the '389, '472, and '476 patents.

117. Upon information and belief, during the prosecution of the applications which led to the '389, '472, and '476 patents, Applicants were aware of the Texas Instruments TMS320AV7110 Integrated Set-Top Box Decoder ("AV7110") and were further aware that the AV7110 had been on sale and/or materials describing the AV7110 were publicly available at

least as early as September 1997, *i.e.*, prior to the priority date that TiVo believes it is entitled to for the '389, '472, and '476 patents.

118. Upon information and belief, during the prosecution of the applications which led to the '389, '472, and '476 patents, Applicants were aware of the Texas Instruments TMS320AV7100 Integrated Set-Top Digital Signal Processor ("AV7100") and were further aware that the AV7110 had been on sale and/or materials describing the AV7100 were publicly available at least as early as October 1997, *i.e.*, prior to the priority date that TiVo believes it is entitled to for the '389, '472, and '476 patents.

119. Applicants failed to disclose the AV7110, AV7100, and publicly available materials related thereto as prior art to the USPTO.

120. The AV7110 is material to patentability because, but for the failure to disclose the AV7110 (and publicly available materials including documents describing the AV7110) to the USPTO, the USPTO would not have allowed one or more claims of the '389, '472, and '476 patents to issue, as detailed in Samsung's May 5, 2016 First Amended Invalidity Contentions and subsequent amendments thereto (which are incorporated herein by reference).

121. The AV7100 is material to patentability because, but for the failure to disclose the AV7100 (and publicly available materials including documents describing the AV7100) to the USPTO, the USPTO would not have allowed one or more claims of the '389, '472, and '476 patents to issue, as detailed in Samsung's May 5, 2016 First Amended Invalidity Contentions and subsequent amendments thereto (which are incorporated herein by reference).

122. Upon information and belief, Applicants' failure to disclose the AV7110, AV7100, and materials related thereto to the USPTO was done with the intent to deceive the USPTO. Upon information and belief, Applicants were aware that Texas Instruments was a

large supplier of components for set top boxes in the 1998 timeframe. Upon information and belief, during the prosecution of the applications which led to the '389, '472, and '476 patents Applicants were aware of Texas Instrument products applicable to TiVo's set top box products, and had access to publicly available materials describing the same, including the AV7110 and AV7100. Yet, Applicants failed to identify the AV7110 and AV7100 and publicly available materials describing the same, *e.g.*, AV7110 and AV7100 technical materials included in Samsung's invalidity contentions (and amendments thereto), in information disclosure statements filed with the USPTO for the nearly fifteen-year span during which TiVo was prosecuting the '389, '472, and '476 patents. Subsequent to Samsung notifying TiVo of the invalidity of the '389, '472, and '476 patents in view of Texas Instruments' AV7110 and AV7100, Applicants have continued to file information disclosure statements with the USPTO in connection with related patent applications, without notifying the USPTO of Samsung's contention or providing to the USPTO information regarding the AV7110, AV7100, and publicly available materials related thereto that were and still are in TiVo's possession. Applicants' continued withholding of material prior art is evidence of a pattern or plan to deceive the USPTO, and, standing alone, is independent evidence that inequitable conduct occurred.

COUNTERCLAIMS

Counterclaim Plaintiffs Samsung Electronics Co., Ltd. ("SEC"), and Samsung Electronics America, Inc. ("SEA") (collectively "Samsung Counterclaimants") hereby allege the following Counterclaims against the Plaintiff:

The Parties

1. Counterclaimant SEC is a corporation organized under the laws of the Republic of Korea, having a place of business at 129 Samsung-ro (Maetan-dong), Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, Korea.

2. Counterclaimant SEA is a New York corporation having a place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660.

3. Based on the assertions in Paragraph 9 of the Complaint, TiVo is a corporation organized and existing under the laws of Delaware with a principal place of business at 2160 Gold Street, Alviso, California 95002-2160.

Jurisdiction and Venue

4. Samsung Counterclaimants' Counterclaims arise under the United States Patent Act, 35 U.S.C. §1 et seq., and the Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2202. The Court has subject matter jurisdiction over Samsung Counterclaimants' Counterclaims under 28 U.S.C. §§ 1331 and 1338. This Court has personal jurisdiction over TiVo at least by virtue of TiVo's purposeful availment of this Court's jurisdiction through the filing of the Complaint against Samsung in this Court, and venue is proper in this District under 28 U.S.C. §§ 1391(c) and 1400(b).

Factual Background

5. From its inception as a small business in Taegu, Korea, Samsung has grown to become one of the world's leading electronics companies, specializing in digital products, system integration, memory, and semiconductors. Today, Samsung's innovative consumer products are widely recognized and appreciated across the globe. Samsung designs, develops,

manufacturers, and sells leading consumer electronics, including mobile phones, smartphones, tablet computers, and laptop computers.

6. Samsung has a long history of groundbreaking innovation across a wide range of technologies. During the 1970s and 1980s, Samsung's core technology businesses diversified and expanded globally. For example, Samsung began production of personal computers in 1983 and selected telecommunications and semiconductors as core business lines in 1988. *About Samsung*, Samsung, <http://www.samsung.com/us/aboutsamsung/corporateprofile/history04.html>. During this period, Samsung additionally challenged itself to restructure old businesses and enter new ones with the aim of becoming one of the world's top five electronics companies.

7. Samsung's commitment to innovation is demonstrated in part by the billions of dollars in research and development expenditures incurred. From 2005 through 2010 alone, Samsung invested more than \$35 billion in research and development. As of November 2014, more than a quarter of all Samsung employees—over 55,100 engineers overall—engaged in cutting-edge research and development projects.

8. Samsung's commitment to innovation and investment in research and development is demonstrated by the fact that SEC has in its portfolio over 40,000 United States utility patents and over 4,000 design patents. Samsung is consistently ranked ahead of other technology companies in terms of the number of issued patents obtained in the United States, with over 4,000 U.S. utility patents issued each year in recent years.

9. Samsung is the owner of the entire right, title and interest in and to U.S. Patent No. 6,181,333 ("the '333 Patent"), entitled "Television graphical user interface having channel and program sorting capabilities," which was duly issued on January 30, 2001. A copy of the '333 Patent is attached as Exhibit A hereto.

10. Samsung is the owner of the entire right, title and interest in and to U.S. Patent No. 7,231,592 (“the ’592 Patent”), entitled “Method and apparatus for a home network auto-tree builder,” which was duly issued on June 12, 2007. A copy of the ’592 Patent is attached as Exhibit B hereto.

11. Samsung is the owner of the entire right, title and interest in and to U.S. Patent No. 8,233,090 (“the ’090 Patent”), entitled “Method of linkage-viewing TV broadcasting program between mobile communication apparatus and digital TV, and mobile communication apparatus and digital TV thereof,” which was duly issued on July 31, 2012. A copy of the ’090 Patent is attached as Exhibit C hereto.

12. Samsung is the owner of the entire right, title and interest in and to U.S. Patent No. 5,978,043 (“the ’043 Patent”), entitled “TV graphical user interface that provides customized lists of programming,” which was duly issued on November 2, 1999. A copy of the ’043 Patent is attached as Exhibit D hereto.

13. TiVo provides directly to consumers set-top boxes with DVR functionality, including without limitation the Sixth Series DVR TiVo Bolt (*e.g.*, 500GB model, 1000GB model) (“TiVo Bolt”) and the Fifth Series DVR TiVo Roamio (*e.g.*, Roamio, Roamio Plus, Roamio Pro) (“TiVo Roamio”), and the Fourth Series TiVo Premiere (collectively, “TiVo DVRs”). TiVo has been providing the TiVo Bolt since at least September 2015. The TiVo Bolt is available for purchase in all fifty states and Washington D.C. TiVo has been providing the TiVo Roamio since at least August 2013. The TiVo Roamio is available for purchase in all fifty states and Washington D.C. TiVo began providing the TiVo Premiere in March 2010. The TiVo Premier was available for purchase in all fifty states and Washington D.C.

14. TiVo provides directly to consumers set-top boxes without DVR functionality such as the TiVo Mini, which can control a TiVo DVR's tuner. TiVo has been providing the TiVo Mini since at least March 2013. The TiVo Mini is available for purchase in all fifty states and Washington D.C.

15. TiVo provides to consumers the TiVo App, which allows users to find and watch shows, schedule recordings, control live TV and recorded shows, and watch recorded shows or in-progress recordings. The TiVo App is available for Android® and iOS® devices. TiVo has been providing the TiVo App for Android® devices since at least 2012. TiVo has been providing the TiVo App for iOS® devices since at least 2011. The TiVo App is available for purchase in all fifty states and Washington D.C.

16. TiVo has infringed the '333, '592, '090, and '043 Patents (the "Samsung Asserted Patents").

COUNT ONE
(Declaration of Noninfringement)

17. Samsung Counterclaimants repeat and incorporate by reference the allegations contained in the preceding paragraphs as if fully set forth herein.

18. On September 18, 2015, TiVo filed a First Amended Complaint naming Samsung Counterclaimants as defendants, and among other things, alleging infringement of the '389, '195, '472, and '476 patents (the "TiVo Asserted Patents").

19. The Complaint alleges that Samsung Counterclaimants infringe the TiVo Asserted Patents by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, certain accused products.

20. Samsung Counterclaimants have not infringed, contributed to the infringement of, or induced infringement of any valid and enforceable claim of the TiVo Asserted Patents.

21. An actual controversy exists between Samsung Counterclaimants and TiVo regarding TiVo's allegations of infringement of the TiVo Asserted Patents.

22. Under 28 U.S.C. §§ 2201 and 2202, Samsung Counterclaimants are entitled to a declaratory judgment that Samsung Counterclaimants have not infringed, contributed to the infringement of, or induced infringement of any valid and enforceable claim of the Asserted Patents.

COUNT TWO
(Declaration of Invalidity)

23. Samsung Counterclaimants repeat and incorporate by reference the allegations contained in the preceding paragraphs as if fully set forth herein.

24. The claims of the TiVo Asserted Patents are invalid for failure to comply with the statutory requirements of one or more of the provisions in Title 35 of the United States Code, including without limitation §§ 101, 102, 103, 112, 116, 119 and/or 120.

25. An actual controversy exists between Samsung Counterclaimants and TiVo regarding the validity of the TiVo Asserted Patents.

26. Under 28 U.S.C. §§ 2201 and 2202, Samsung Counterclaimants are entitled to a declaratory judgment that the claims of the TiVo Asserted Patents are invalid.

COUNT THREE
(Infringement of U.S. Patent No. 6,181,333)

27. Samsung Counterclaimants repeat and incorporate by reference the allegations contained in the preceding paragraphs as if fully set forth herein.

28. Samsung is the owner of the entire right, title and interest in and to the '333 Patent.

29. In violation of 35 U.S.C. § 271, TiVo has infringed and is currently infringing, literally and/or under the doctrine of equivalents, at least claims 1, 2, 7, and 19 of the '333 Patent

by, among other things, making, using, offering for sale, selling, and/or importing into the United States unlicensed systems, products, and/or services that infringe at least these claims. For at least claims 1, 2, 7, and 19 of the '333 Patent, such unlicensed systems, products, and/or services include, by way of example and without limitation, the TiVo DVRs (*e.g.*, TiVo Bolt, TiVo Roamio, TiVo Premiere) and the TiVo Mini. For example, claim 1 of the '333 Patent claims:

A television (TV) system comprising:

- (a) a CPU;
- (b) a TV monitor controlled by said CPU for displaying a TV program guide including a graphical channel changer having channel objects for indicating TV channels;
- (c) wherein in a first mode of operation, said channel objects are arranged by said CPU according to numbers of said TV channels, and in a second mode of operation, said channel objects are arranged by said CPU according to names of said TV channels; and
- (d) whereby said graphical channel changer allows selection of a desired TV program for viewing.

The TiVo DVRs and the TiVo Mini satisfy each limitation of claim 1. For example only, the TiVo DVRs' functionality permits a channel object to be sorted by channel name or channel number.

30. In violation of 35 U.S.C. § 271(a), TiVo has directly infringed at least claims 1, 2, 7, and 19 of the '333 Patent by i) making, leasing, and/or using its TiVo DVRs and TiVo Mini; ii) making, offering for sale, and/or selling its services through which users access and thereby put these products into service to infringe the claimed methods/system; and iii) making, using,

offering for sale, selling, and/or importing into the United States these products and by using such products in its infringing systems.

31. In violation of 35 U.S.C. § 271(b), TiVo also takes active steps to induce infringement of at least claims 1, 2, 7, and 19 of the '333 Patent by others, including its customers, and TiVo takes such active steps knowing that those steps will induce, encourage and facilitate direct infringement of at least claims 1, 2, 7, and 19 of the '333 Patent by others. Such active steps that TiVo knows, or should know, induce others to directly infringe at least claims 1, 2, 7, and 19 of the '333 Patent include, but are not limited to, encouraging, advertising (including by internet websites, *etc.*), promoting, and instructing others to use and/or how to use the TiVo DVRs and TiVo Mini, including those made, sold, offered for sale, and/or imported by TiVo or an importer authorized by TiVo.

32. In violation of 35 U.S.C. § 271(c), TiVo contributes to the infringement of the '333 Patent by others, including its customers that directly infringe at least claims 1, 2, 7, and 19 of the '333 Patent. Acts by TiVo that contribute to the infringement of others include, but are not limited to, the sale, offer for sale, and/or import by TiVo of TiVo DVRs and TiVo Mini, service plans, and/or equipment associated with service plans, knowing the same to be especially made or especially adapted for use in an infringement of claims 1, 2, 7, and 19 of the '333 Patent. Such products, service plans, and/or equipment associated with service plans are not suitable for substantial noninfringing use.

33. By way of at least this Third Amended Answer, TiVo knows of the '333 Patent and performs acts that it knows, or should know, induce, and/or contribute to the direct infringement of at least claims 1, 2, 7, and 19 of the '333 Patent by third parties.

34. TiVo undertook and continues its infringing actions despite an objectively high likelihood that such activities infringe at least claims 1, 2, 7, and 19 of the '333 Patent, which have been duly issued by the USPTO, and are presumed valid. For example, since at least the filing of this Third Amended Answer, TiVo has been aware of an objectively high likelihood that its actions constituted, and continue to constitute infringement of at least c claims 1, 2, 7, and 19 of the '333 Patent and that those claims of the '333 Patent are valid. TiVo could not reasonably subjectively believe that its actions do not constitute infringement of at least claims 1, 2, 7, and 19 of the '333 Patent, nor could it reasonably subjectively believe that the patent is invalid. Despite that knowledge, subjective belief, and the objectively high likelihood that its actions constitute infringement of at least claims 1, 2, 7, and 19 of the '333 Patent, TiVo has continued its infringing activities. As such, TiVo willfully infringes the '333 Patent.

35. TiVo's acts of infringement have caused damage to Samsung in an amount to be proven at trial. As a consequence of TiVo's infringement, Samsung is entitled to recover damages adequate to compensate it for the infringement complained of herein, but in no event less than a reasonable royalty.

COUNT FOUR
(Infringement of U.S. Patent No. 7,231,592)

36. Samsung Counterclaimants repeat and incorporate by reference the allegations contained in the preceding paragraphs as if fully set forth herein.

37. Samsung is the owner of the entire right, title and interest in and to the '592 Patent.

38. In violation of 35 U.S.C. § 271, TiVo has infringed and is currently infringing, literally and/or under the doctrine of equivalents, at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent by, among other things, making, using, offering for sale, selling, and/or importing

into the United States unlicensed systems, products, and/or services that infringe at least these claims. For at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent, such unlicensed systems, products, and/or services include, by way of example and without limitation, the TiVo DVRs (*e.g.*, TiVo Bolt, TiVo Roamio, TiVo Premiere) in combination with each other, TiVo Mini and/or the TiVo App. For example, claim 1 of the '592 Patent claims:

A method for implementing command and control for home devices via a home network, the method comprising the steps of:

- (a) connecting a first home device to the home network;
- (b) connecting a second home device to the home network, which is capable of being controlled by said first home device;
- (c) detecting presently connected home devices on the home network in an autonomous manner;
- (d) accepting user input from a user by a presently connected home device that is capable of displaying a user interface; and
- (e) controlling the second home device by sending control and command information from the first home device to the second home device based on the user input.

The TiVo DVRs in combination with each other, the TiVo Mini and/or the TiVo App satisfy each limitation of claim 1. For example only, in a TiVo multi-device setup (*e.g.* multiple TiVo boxes, such as the TiVo DVRs and the TiVo Mini), a user can use one TiVo device to control another such as by choosing to record a TV program using a TiVo Mini, which will cause the primary TiVo (*e.g.* TiVo DVRs) to record and store a program.

39. In violation of 35 U.S.C. § 271(a), TiVo has directly infringed at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent by i) making, leasing, and/or using its TiVo DVRs in

combination with each other, its TiVo Mini and/or the TiVo App; ii) making, offering for sale, and/or selling its services through which users access and thereby put these products into service to infringe the claimed methods/system; and iii) making, using, offering for sale, selling, and/or importing into the United States these products and by using such products in its infringing systems.

40. In violation of 35 U.S.C. § 271(b), TiVo also takes active steps to induce infringement of at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent by others, including its customers, and TiVo takes such active steps knowing that those steps will induce, encourage and facilitate direct infringement of at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent by others. Such active steps that TiVo knows, or should know, induce others to directly infringe at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent include, but are not limited to, encouraging, advertising (including by internet websites, *etc.*), promoting, and instructing others to use and/or how to use the TiVo DVRs in combination with each other, with the TiVo Mini and/or the TiVo App, including those made, sold, offered for sale, and/or imported by TiVo or an importer authorized by TiVo.

41. In violation of 35 U.S.C. § 271(c), TiVo contributes to the infringement of the '592 Patent by others, including its customers that directly infringe at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent. Acts by TiVo that contribute to the infringement of others include, but are not limited to, the sale, offer for sale, and/or import by TiVo of TiVo DVRs, TiVo Mini, and TiVo App, service plans, and/or equipment associated with service plans, knowing the same to be especially made or especially adapted for use in an infringement of claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent. Such products, service plans, and/or equipment associated with service plans are not suitable for substantial noninfringing use.

42. By way of at least this Third Amended Answer, TiVo knows of the '592 Patent and performs acts that it knows, or should know, induce, and/or contribute to the direct infringement of at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent by third parties.

43. TiVo undertook and continues its infringing actions despite an objectively high likelihood that such activities infringe at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent, which have been duly issued by the USPTO, and are presumed valid. For example, since at least the filing of this Third Amended Answer, TiVo has been aware of an objectively high likelihood that its actions constituted, and continue to constitute infringement of at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent and that those claims of the '592 Patent are valid. TiVo could not reasonably subjectively believe that its actions do not constitute infringement of at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent, nor could it reasonably subjectively believe that the patent is invalid. Despite that knowledge, subjective belief, and the objectively high likelihood that its actions constitute infringement of at least claims 1, 2, 4-7, 12, 13, 15, 17-19 of the '592 Patent, TiVo has continued its infringing activities. As such, TiVo willfully infringes the '592 Patent.

44. TiVo's acts of infringement have caused damage to Samsung in an amount to be proven at trial. As a consequence of TiVo's infringement, Samsung is entitled to recover damages adequate to compensate it for the infringement complained of herein, but in no event less than a reasonable royalty.

COUNT FIVE
(Infringement of U.S. Patent No. 8,233,090)

45. Samsung Counterclaimants repeat and incorporate by reference the allegations contained in the preceding paragraphs as if fully set forth herein.

46. Samsung is the owner of the entire right, title and interest in and to the '090 Patent.

47. In violation of 35 U.S.C. § 271, TiVo has infringed and is currently infringing, literally and/or under the doctrine of equivalents, at least claims 1, 2, and 4 of the '090 Patent by, among other things, making, using, offering for sale, selling, and/or importing into the United States unlicensed systems, products, and/or services that infringe at least these claims. For at least claims 1, 2, and 4 of the '090 Patent, such unlicensed systems, products, and/or services include, by way of example and without limitation, the TiVo App in combination with the TiVo DVRs (*e.g.*, TiVo Bolt, TiVo Roamio, TiVo Premiere), and/or its TiVo Mini together with its TiVo DVRs. For example, claim 1 of the '090 Patent claims:

A method of controlling a TV for linkage-viewing a program between a mobile communication apparatus and the TV, the method comprising:

- (a) receiving a linkage-viewing command in order to linkage view a program which is being viewed on the mobile communication apparatus;
- (b) receiving data information on the program from the mobile communication apparatus in connection with the linkage viewing command; and
- (c) selecting a TV channel corresponding to a current channel on which the program is being viewed on the mobile communication apparatus based on the received data information and displaying the program, received from a broadcaster independently of the mobile communication apparatus, on the selected TV channel.

The TiVo App in combination with the TiVo DVRs, or with the TiVo DVRs and the TiVo Mini, satisfy each limitation of claim 1. For example only, a linkage-viewing command can be

received through the TiVo App to select a TV channel corresponding to a program which is being viewed on the TiVo App.

48. In violation of 35 U.S.C. § 271(a), TiVo has directly infringed at least claims 1, 2, and 4 of the '090 Patent by i) making, leasing, and/or using its TiVo App in combination with the TiVo DVRs (*e.g.*, TiVo Bolt, TiVo Roamio, TiVo Premiere), and/or in combination with its TiVo Mini together with its TiVo DVRs; ii) making, offering for sale, and/or selling its services through which users access and thereby put these products into service to infringe the claimed methods/system; and iii) making, using, offering for sale, selling, and/or importing into the United States these products and by using such products in its infringing systems.

49. In violation of 35 U.S.C. § 271(b), TiVo also takes active steps to induce infringement of at least claims 1, 2, and 4 of the '090 Patent by others, including its customers, and TiVo takes such active steps knowing that those steps will induce, encourage and facilitate direct infringement of at least claims 1, 2, and 4 of the '090 Patent by others. Such active steps that TiVo knows, or should know, induce others to directly infringe at least claims 1, 2, and 4 of the '090 Patent include, but are not limited to, encouraging, advertising (including by internet websites, *etc.*), promoting, and instructing others to use and/or how to use the TiVo App in combination with the TiVo DVRs, and/or the TiVo App in combination with its TiVo Mini together with the TiVo DVRs, including those made, sold, offered for sale, and/or imported by TiVo or an importer authorized by TiVo.

50. In violation of 35 U.S.C. § 271(c), TiVo contributes to the infringement of the '090 Patent by others, including its customers that directly infringe at least claims 1, 2, and 4 of the '090 Patent. Acts by TiVo that contribute to the infringement of others include, but are not limited to, the sale, offer for sale, and/or import by TiVo of TiVo DVRs, TiVo Mini, and TiVo

App, service plans, and/or equipment associated with service plans, knowing the same to be especially made or especially adapted for use in an infringement of claims 1, 2, and 4 of the '090 Patent. Such products, service plans, and/or equipment associated with service plans are not suitable for substantial noninfringing use.

51. By way of at least this Third Amended Answer, TiVo knows of the '090 Patent and performs acts that it knows, or should know, induce, and/or contribute to the direct infringement of at least claims 1, 2, and 4 of the '090 Patent by third parties.

52. TiVo undertook and continues its infringing actions despite an objectively high likelihood that such activities infringe at least claims 1, 2, and 4 of the '090 Patent, which have been duly issued by the USPTO, and are presumed valid. For example, since at least the filing of this Third Amended Answer, TiVo has been aware of an objectively high likelihood that its actions constituted, and continue to constitute infringement of at least claims 1, 2, and 4 of the '090 Patent and that those claims of the '090 Patent are valid. TiVo could not reasonably subjectively believe that its actions do not constitute infringement of at least claims 1, 2, and 4 of the '090 Patent, nor could it reasonably subjectively believe that the patent is invalid. Despite that knowledge, subjective belief, and the objectively high likelihood that its actions constitute infringement of at least claims 1, 2, and 4 of the '090 Patent, TiVo has continued its infringing activities. As such, TiVo willfully infringes the '090 Patent.

53. TiVo's acts of infringement have caused damage to Samsung in an amount to be proven at trial. As a consequence of TiVo's infringement, Samsung is entitled to recover damages adequate to compensate it for the infringement complained of herein, but in no event less than a reasonable royalty.

COUNT SIX
(Infringement of U.S. Patent No. 5,978,043)

54. Samsung Counterclaimants repeat and incorporate by reference the allegations contained in the preceding paragraphs as if fully set forth herein.

55. Samsung is the owner of the entire right, title and interest in and to the '043 Patent.

56. In violation of 35 U.S.C. § 271, TiVo has infringed and is currently infringing, literally and/or under the doctrine of equivalents, at least claim 1 of the '043 Patent by, among other things, making, using, offering for sale, selling, and/or importing into the United States unlicensed systems, products, and/or services that infringe at least these claims. For at least claim 1 of the '043 Patent, such unlicensed systems, products, and/or services include, by way of example and without limitation, the TiVo DVRs (*e.g.*, TiVo Bolt, TiVo Roamio, TiVo Premiere) and the TiVo Mini. For example, claim 1 of the '043 Patent claims:

A television (TV) system comprising:

- (a) a CPU, and
- (b) a TV monitor controlled by said CPU for displaying in a first mode, a regular channel changer for enabling a user to select a TV channel among all of TV channels available in the TV system, and for displaying in a second mode, a customized channel changer for enabling the user to select a TV channel among a customized list of the TV channels, said customized channel changer having the same configuration as said regular channel changer.

The TiVo DVRs and TiVo Mini satisfy each limitation of claim 1. For example only, the TiVo DVRs can display a regular channel changer that enables a user to select a TV channel among all TV channels available in the TV system and can display a customized channel changer that

enables a user to select a TV channel among a customized list of TV channels in accordance with the claims.

57. In violation of 35 U.S.C. § 271(a), TiVo has directly infringed at least claim 1 of the '043 Patent by i) making, leasing, and/or using its TiVo DVRs and TiVo Mini; ii) making, offering for sale, and/or selling its services through which users access and thereby put these products into service to infringe the claimed methods/system; and iii) making, using, offering for sale, selling, and/or importing into the United States these products and by using such products in its infringing systems.

58. In violation of 35 U.S.C. § 271(b), TiVo also takes active steps to induce infringement of at least claim 1 of the '043 Patent by others, including its customers, and TiVo takes such active steps knowing that those steps will induce, encourage and facilitate direct infringement of at least claim 1 of the '043 Patent by others. Such active steps that TiVo knows, or should know, induce others to directly infringe at least claim 1 of the '043 Patent include, but are not limited to, encouraging, advertising (including by internet websites, *etc.*), promoting, and instructing others to use the TiVo DVRs and TiVo Mini, including those made, sold, offered for sale, and/or imported by TiVo or an importer authorized by TiVo.

59. In violation of 35 U.S.C. § 271(c), TiVo contributes to the infringement of the '043 Patent by others, including its customers that directly infringe at least claim 1 of the '043 Patent. Acts by TiVo that contribute to the infringement of others include, but are not limited to, the sale, offer for sale, and/or import by TiVo of TiVo DVRs and TiVo Mini, service plans, and/or equipment associated with service plans, knowing the same to be especially made or especially adapted for use in an infringement of claim 1 of the '043 Patent. Such products,

service plans, and/or equipment associated with service plans are not suitable for substantial noninfringing use.

60. By way of at least this Third Amended Answer, TiVo knows of the '043 Patent and performs acts that it knows, or should know, induce, and/or contribute to the direct infringement of at least claim 1 of the '043 Patent by third parties.

61. TiVo undertook and continues its infringing actions despite an objectively high likelihood that such activities infringe at least claim 1 of the '043 Patent, which have been duly issued by the USPTO, and are presumed valid. For example, since at least the filing of this Third Amended Answer, TiVo has been aware of an objectively high likelihood that its actions constituted, and continue to constitute infringement of at least claim 1 of the '043 Patent and that those claims of the '043 Patent are valid. TiVo could not reasonably subjectively believe that its actions do not constitute infringement of at least claim 1 of the '043 Patent, nor could it reasonably subjectively believe that the patent is invalid. Despite that knowledge, subjective belief, and the objectively high likelihood that its actions constitute infringement of at least claim 1 of the '043 Patent, TiVo has continued its infringing activities. As such, TiVo willfully infringes the '043 Patent.

62. TiVo's acts of infringement have caused damage to Samsung in an amount to be proven at trial. As a consequence of TiVo's infringement, Samsung is entitled to recover damages adequate to compensate it for the infringement complained of herein, but in no event less than a reasonable royalty.

COUNT SEVEN
(Declaration of Unenforceability)

63. Samsung Counterclaimants repeat and incorporate by reference the allegations contained in the preceding paragraphs as if fully set forth herein.

64. As pleaded with particularity in Samsung's Tenth Affirmative Defense, the '389, '472, and '476 patents are unenforceable by reason of inequitable conduct and/or unclean hands before the USPTO during the prosecution of those patents and related patent applications.

65. An actual controversy exists between Samsung Counterclaimants and TiVo regarding the enforceability of the TiVo Asserted Patents.

66. Under 28 U.S.C. §§ 2201 and 2202, Samsung Counterclaimants are entitled to a declaratory judgment that the claims of the TiVo Asserted Patents are unenforceable.

PRAYER FOR RELIEF

For these reasons, Samsung Counterclaimants respectfully pray for the following relief:

- a. Declaratory judgment that Samsung Counterclaimants have not infringed, contributed to the infringement of, or induced infringement of any claim of the TiVo Asserted Patents;
- b. Declaratory judgment that the claims of the TiVo Asserted Patents are invalid;
- c. Declaratory judgment that the claims of the '389, '472, and '476 patents are unenforceable;
- d. Judgment against Plaintiff dismissing the Complaint and denying with prejudice all relief requested in Plaintiff's Complaint and its prayer therein, such that Plaintiff takes nothing;
- e. A declaration that the Samsung Asserted Patents are valid;
- f. A declaration that TiVo has directly and/or indirectly infringed the Samsung Asserted Patents;
- g. An award of damages arising out of TiVo's infringement of the Samsung Asserted Patents sufficient to compensate Samsung, including enhanced damages

pursuant to 35 U.S.C. § 284, as well as any prejudgment and post-judgment interest, in an amount according to proof;

- h. Judgment that this case is an exceptional case under 35 U.S.C. § 285 and/or other applicable laws;
- i. Judgment awarding Samsung Counterclaimants their costs and attorney's fees; and
- j. Judgment awarding Samsung Counterclaimants such other relief the Court deems just, equitable, and proper.

JURY DEMAND

Samsung Counterclaimants demand a trial by jury for all issues so triable.

Dated: August 8, 2016

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system per Local Rule CV-5(a)(3) on this 8th day of August, 2016. Any other counsel of record will be served by first class mail.

/s/ Melissa R. Smith
Melissa R. Smith

CERTIFICATE OF AUTHORIZATION TO FILE UNDER SEAL

This is to certify that this document should be filed under seal because the document, and any exhibits, contain material covered by the Stipulated Protective Order approved and entered in this case on April 21, 2016 (Dkt. 55).

/s/ Melissa Smith
Melissa R. Smith